

What is claimed is:

1. An index to list physical items in the vicinity of a user of said index.

2. An index according to claim 1 and wherein said vicinity is within the same space  
5 as said user and said space is one of the following: a store, a library, a shelf, an aisle, within a  
given radius, a street, a city, a campus, a building, an area and a park.

3. An index according to claim 1 which comprises information about said physical  
items, wherein said information comprises content found on tags associated with said  
10 physical items.

4. An index according to claim 3 and wherein said information comprises a  
description of said physical items and their locations.

15 5. A personal index generator comprising:  
a personal index;  
a personal index updater to update said personal index with information  
about items within a changeable space in the vicinity of said person.

20 6. A generator according to claim 5 and also comprising a search engine to search  
for items within said personal index.

7. A generator according to claim 6 and also comprising a ranker for ranking the output of said search engine.

8. A generator according to claim 6 and wherein said space is one of the following spaces: a store, a library, a shelf, an aisle, within a given radius, a street, a city, a campus, a building, an area and a park.

9. A generator according to claim 8 and also comprising a space filter to provide said personal index updater only with information from items within said changeable space.

10. A generator according to claim 5 and also comprising a location sensor to sense the location of a person and to provide said location to a server.

11. A generator according to claim 10 and also comprising a receiver to receive information about items within said vicinity from said server.

12. A generator according to claim 10 and wherein said server comprises:

- a space-wide index comprising information about items in a physical space larger than said vicinity of said person; and
- a personal index builder to search said space-wide index for the items in the vicinity of said location and to provide said information about said items to said personal index updater.

13. A generator according to claim 12 and also comprising a space-wide index updater to update said space-wide index with information about items in said physical space.

14. A generator according to claim 13 and also comprising a space filter to provide  
5 said space-wide index updater only with information from items within said physical space.

15. A generator according to claim 14 and also comprising a search engine to search for items within said personal index.

10 16. A generator according to claim 15 and also comprising a ranker for ranking the output of said search engine.

17. A generator according to claim 15 and wherein said physical space is one of the following spaces: a store, a library, a street, a city, a campus, a building, an area and a park.

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18. A personal index generator comprising:

a location sensor to sense the location of a person;

a space-wide index comprising information about items in a physical space larger than the vicinity of said person;

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a search engine to search said space-wide index for the items in the vicinity of said location which are requested by said person.

19. A generator according to claim 18 and also comprising an index updater to update said space-wide index with information about items in said physical space.

20. A generator according to claim 18 and wherein said location sensor comprises a unit to read a tag worn by said person, said unit being one of the following: an optical reader, a video camera, an infra-red detector and an RF tag reader.

21. A generator according to claim 18 and also comprising a ranker for ranking the output of said search engine.

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22. A generator according to claim 18 and wherein said physical space is one of the following: a store, a library, a street, a city, a campus, a building, an area and a park.

23. A generator according to claim 18 and wherein said vicinity is a space smaller than said physical space.

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24. A generator according to claim 18 and also comprising a logger to log at least the movement of items in said physical space and the searches performed by said search engine and a recommender to recommend items to said person based on the results of said logger.

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25. A dynamic index to list physical items in the changing vicinity of a user of said index.

26. An index according to claim 25 and wherein said vicinity is within the same space as said user and said space is one of the following: a store, a library, a shelf, an aisle, within a given radius, a street, a city, a campus, a building, an area and a park.

5           27. An index according to claim 25 which comprises information about said physical items, wherein said information comprises content found on tags associated with said physical items.

28. An index according to claim 27 and wherein said information comprises a  
10 description of said physical items and their locations.

29. A method comprising:

                    dynamically storing in an index the physical items in the changing  
vicinity of a user of said index.

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30. A method according to claim 29 and wherein said vicinity is within the same space as said user and said space is one of the following: a store, a library, a shelf, an aisle, within a given radius, a street, a city, a campus, a building, an area and a park.

20           31. A method according to claim 29 and also comprising listing information about said physical items, wherein said information comprises content found on tags associated with said physical items.

32. A method according to claim 31 and wherein said information comprises a description of said physical items and their locations.

33. An index generator comprising:

5                           a location-based index;

                          an index updater to update said location-based index with information about items within a changeable space in the vicinity of said generator.

34. A generator according to claim 33 and also comprising a search engine to  
10   search for items within said location-based index.

35. A generator according to claim 34 and also comprising a ranker for ranking the output of said search engine.

15                   36. A generator according to claim 34 and wherein said space is one of the following spaces: a store, a library, a shelf, an aisle, within a given radius, a street, a city, a campus, a building, an area and a park.

37. A generator according to claim 36 and also comprising a space filter to provide  
20   said location-based index updater only with information from items within said changeable space.

38. A generator according to claim 33 and also comprising a location sensor to sense the location of said generator and to provide said location to a server.

39. A generator according to claim 38 and also comprising a receiver to receive  
5 information about items within said vicinity from said server.

40. A generator according to claim 38 and wherein said server comprises:

a space-wide index comprising information about items in a physical  
space larger than said location of said generator; and

10 a location-based index builder to search said space-wide index for the  
items in the vicinity of said location and to provide said information about said  
items to said location-based index updater.

41. A generator according to claim 40 and also comprising a space-wide index  
15 updater to update said space-wide index with information about items in said physical space.

42. A generator according to claim 41 and also comprising a space filter to provide  
said space-wide index updater only with information from items within said physical space.

20 43. A generator according to claim 42 and also comprising a search engine to  
search for items within said location-based index.

44. A generator according to claim 43 and also comprising a ranker for ranking the output of said search engine.

45. A generator according to claim 43 and wherein said physical space is one of the following spaces: a store, a library, a street, a city, a campus, a building, an area and a park.

46. A location-based index generator comprising:

a location sensor to sense the location of said generator;

a space-wide index comprising information about items in a physical space larger than the vicinity of said generator;

a search engine to search said space-wide index for the items in the vicinity of said location which are requested by said generator.

47. A generator according to claim 46 and also comprising an index updater to update said space-wide index with information about items in said physical space.

48. A generator according to claim 46 and wherein said location sensor comprises a unit to read a tag worn by said generator, said unit being one of the following: an optical reader, a video camera, an infra-red detector and an RF tag reader.

49. A generator according to claim 46 and also comprising a ranker for ranking the output of said search engine.



50. A generator according to claim 46 and wherein said physical space is one of the following: a store, a library, a street, a city, a campus, a building, an area and a park.

51. A generator according to claim 46 and wherein said vicinity is a space smaller  
5 than said physical space.

52. A generator according to claim 46 and also comprising a logger to log at least the movement of items in said physical space and the searches performed by said search engine and a recommender to recommend items to said generator based on the results of said  
10 logger.

53. A dynamic index to list physical items in the changing vicinity of a user of said index.

54. An index according to claim 53 and wherein said vicinity is within the same  
15 space as said generator and said space is one of the following: a store, a library, a shelf, an aisle, within a given radius, a street, a city, a campus, a building, an area and a park.

55. An index according to claim 53 which comprises information about said  
20 physical items, wherein said information comprises content found on tags associated with said physical items.

56. An index according to claim 55 and wherein said information comprises a description of said physical items and their locations.

57. A method comprising:

dynamically storing in an index the physical items in the changing vicinity of a generator of said index.

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58. A method according to claim 57 and wherein said vicinity is within the same space as said generator and said space is one of the following: a store, a library, a shelf, an aisle, within a given radius, a street, a city, a campus, a building, an area and a park.

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59. A method according to claim 57 and also comprising listing information about said physical items, wherein said information comprises content found on tags associated with said physical items.

60. A method according to claim 59 and wherein said information comprises a description of said physical items and their locations.

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